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A Typo-Chronological and Analytical Lithic Study of the Neolithic Period in Jordan. A Case Study of Tell Abu Suwwan *

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Abstract

Tell Abu Suwwan is one of the Neolithic mega-sites of Jordan, located east of the ruins of Roman Jerash, north of modern Amman. Four seasons of excavation revealed continuous occupation during the MPPNB, LPPNB, PPNC and Yarmoukian periods. These excavations produced enormous numbers of chipped stone artifacts from 45 units (each unit is 5*5 m). This study presents the results of a comprehensive analysis of approximately 1500 lithic artifacts and 300 arrowheads recovered from securely dated contexts. This research demonstrates that the defining characteristics of the lithic assemblages found at Tell Abu Suwwan correspond strongly to those of the other major Pre-Pottery Neolithic B and early Pottery Neolithic sites in the southern Levant, with the added recognition of some unique tools and tool characteristics.

Keywords: Tell Abu Suwwan, Neolithic Period, Lithic Analysis, Jordan.

Introduction

Tell Abu Suwwan is one of the Pre-Pottery Neolithic mega-sites known for their precociously early size and architectural sophistication (Gebel 2004:6; al-Nahar 2009; Simmons 2007: 176-179). Abu Suwwan, measuring 1.5 hectares, lies east of the Roman archaeological site of Jerash in northern Jordan (Figure 1). The site was first recorded by Lancaster Harding (1948) and tested in 1955 by Diana Kirkbride (1958). More recently it was surveyed by Albert Leonard in 1984 and by Alan Simmons, Deborah Olszewski, and Zeidan Kafafi in 1988.

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Figure 1: Jordanian Pre Pottery Neolithic B Sites.

Four summer excavation seasons in 2005, 2006, 2007 and 2008 were sponsored by the University of Jordan with the support of the Department of Antiquities, Jordan. Results of the four seasons of excavation confirmed that Tell Abu Suwwan dates to the Pre-Pottery Neolithic B (PPNB) and Pottery Neolithic (Yarmoukian) periods. Although the site contains its own distinct architecture, it shares various similarities with several Levantine Pre-Pottery Neolithic (PPN) sites and Pottery Neolithic (PN) sites (al-Nahar 2008 and 2010). Using a 5 x 5 m grid, 45 excavation units (each measuring 4 x 4 m) were established in Area A, located on the northwest side of the site, and Area B, on its northeast side. Over the course of these field investigations, many units were opened during multiple seasons, and most of the bulks were removed and excavated systematically, producing enormous assemblages of chipped stone artifacts (al-Nahar 2009).

The characteristics of the lithic assemblages found at Tell Abu Suwwan correspond to other major PPNB and early PN sites in the Levant, including many Jordanian sites. This lithic assemblage correlation is recognizable when taking into consideration intersite and intrasite lithic assemblage variability. The variability of the chipped stone from this site probably stems from the ready availability of raw materials, the site's location, and the economic activities preformed in this settlement (Kuijt and Goring-Morris 2002). Tell Abu Suwwan's lithic technology resembles those of PPNB and PN Levantine sites such as Jericho (Kenyon 1956:69; 1970:2), Tell Ramad (de Contenson 1971:278-285), Tell Abu Hureyra (Moore et al. 2000:493), Tell Aswad (Cauvin 2000:39, 76-78), Abu Ghosh (Lechevallier 1978:57), Tell el-Kowm (Dornemann 1986), Yiftahel (Garfinkel 1987:199-212), Nahal Hemar (Bar-Yosef and Alon 1988), Nahal Oren (Stekelis 1963:2-4) Ashkelon (cited in Kuijt and Goring-Morris 2002:415), Byblos (Moore 1973:36-68; Cauvin 1968; Dunand 1973 cited in Garfinkel 1993:115-134), Sabi Abyad (Akkermanns 1993), Munhatta (Perrot 1968:406-419; Garfinkel 1993:117), Sha'ar Hagolan (Stekelis 1951:1-19; Garfinkel 1993:116-118) and Wadi Rabah (Kaplan 1958, 1970; Gopher 1998:211). In addition, Tell Abu Suwwan's lithic assemblage parallels those recovered from other Jordanian Neolithic sites such as Baida (Kirkbride 1966:8-61), Basta (Gebel et al. 1988:101-134; Gebel et al. 2004:71-104), Ba'ja (Bienert and Gebel 2004:119-114), Ain Jammam (Fino 2004:105-111), Ghwair I (Najjar 1994: 78-82, Simmons 2007:169-174), es-Sifiya (Mahasneh 2004:45-63), Khirbet Hammam (Peterson 2004:334) and Ayn Abu Nukhayla (Henry et al. 2003:1-30); as well as Yarmoukian sites such as Abu Thawwab (Kafafi 1988:451-471), 'Ain Ghazal (Rollefson 1993:91-100; Rollefson and Köhler-Rollefson 1993:33-42; Rollefson, Simmons and Kafafi 1992:443-470), Wadi Shu'eib (Simmons et al. 2001:1-39), Tabaqat al-Buma (Banning et al. 1992:31-43; 1996:50-69), and 'Ain Rahub (Muheisen et al. 1988:493:499; Kafafi 1993:101-102).

Lithic Analysis

The Chronology of Tell Abu Suwwan

The lithic assemblages from Tell Abu Suwwan were collected from four

stratified phases linked to different stages of the Neolithic period. Radiocarbon dates from Tell Suwwan demonstrate that the site was occupied during the MPPNB, LPPNB, PPNC and Yarmoukian periods, making Tell Abu Suwwan one of the few sites in Jordan with a stratified sequence through the Neolithic period. Similar continuity of site occupation is known at only two other Neolithic sites in Jordan: ‘Ain Ghazal (Kafafi 2001b:31-42; al-Nahar 2009; Simmons 2007:176) and Wadi Shu‘eib (Kafafi 2004: 115; Simmons et al. 2001:1-39; Simmons 2007:129).

Table 1: Tell Abu Suwwan chronology.

YEAR	AREA	SQUARE	LOCUS	LEVEL	14C BP non-calibrated	14C BC calibrated	PERIOD
2006	A	D5	23	510.89	8,410 ± 56	7,469 ± 68	LPPNB
2006	B	K6	3	515.39	8,259 ± 49	7,306 ± 100	LPPNB
2008	B	K6	27	514.16	8,440 ± 120	7,453 ± 118	LPPNB
2008	B	F8	6	513.99	8,310 ± 50	7,380 ± 76	LPPNB
2006	A	D4	6		8,140 ± 100	7,141 ± 157	LPPNB
2005	A	E2	6	510.97	8,380 ± 56	7,446 ± 68	M/LPPNB
2008	B	K6	24	514.31	8,484 ± 55	7,547 ± 29	M/LPPNB
2008	B	K6	29	514.14	8,570 ± 51	7,596 ± 31	M/LPPNB
2006	A	V3	4	510.75	8,931 ± 58	8,109 ± 108	MPPNB
2006	B	W3	5	511.11	9,048 ± 59	8,267 ± 32	MPPNB
2008	B	G7/F7	17	514.61	8,699 ± 84	7,777 ± 133	MPPNB
2008	B	K6	38	513.64	8,680 ± 60	7,710 ± 81	MPPNB
2006	A	D5	23	510.6	7,975 ± 62	6,888 ± 116	PPNC
2005	B	J6	10		7870 ± 50	6,755 ± 87	PPNC
2008	A	D5	39	512.47	7,760 ± 120	6,659 ± 153	PPNC/Yarmoukian
2008	B	0A	2	515.34	7,713 ± 79	6,558 ± 68	PPNC/Yarmoukian
2006	A	D4	7		7630 ± 50	6,498 ± 47	PPNC/Yarmoukian
2008	B	F8	3	514.84	7,422 ± 74	6,304 ± 74	Yarmoukian
2008	B	CD		514.54	7,304 ± 97	6,192 ± 107	Yarmoukian

Lithic Typology

Typological analysis is used here to illuminate similarities and differences between Neolithic sites in the Levant and to investigate the manufacturing stages represented at Tell Abu Suwwan and the cultural activities they reflect. Numerous aspects of chipped stone technology are manifested at Tell Abu Suwwan, including Large Flakes, Flake Tools, Trimming Flakes, Blades, Blade Tools, Bladelets, Bladelet Tools, Cores and Core Fragments. As a means of shedding additional light on the manufacturing process, cores are divided in this analysis as follows: Single Platform Cores, Opposed Platform Cores, Multiple Platform Cores, Ninety-Degree Platforms, Naviform Platform Cores, Discoidal Platform Cores, Sub-Discoidal Platform Cores, Pyramidal Cores and Sub-Pyramidal Cores. Core technological elements consist of Core Fragments, Core Tablets, Platform Blades, Crested Bades and Rejuvenations (flakes and blades). Finished tool types are distinguished as Burins, Borers, Scrapers (End-Scrapers, Circular Tanged Scrapers and Jarash Scrapers), Sickle Blades, Bifacial Knifes, Truncations (on blades and flakes), Denticulates, Notches, Retouched Blades and Retouched Flakes. Arrowheads recognized at the site include al-Khiam, Helwan, Jericho, Mureybatian, Byblos, Byblos/Jericho, Byblos/Amuq and Amuq points. Because Truncations, Notches and Denticulates constitute the majority of tools from Abu Suwwan, they are sub-divided further as Truncated Flakes, Truncated Blades, Hagdud Truncations, Notched Blades, Notched Flakes, Denticulated Blades and Denticulated Flakes.

Typo-Chronological Analysis

Typo-chronological analysis of cultural activities for each stage of the Neolithic can clarify changes in site function through time. This type of analysis helps explain architectural modifications on the one hand and socio-economical changes on the other.

I- MPPNB Lithic Analysis

Middle PPNB lithics are dominated by blade tool technology (54% of analyzed lithics; figure 2), while the flake tools represent 28% of the analyzed chipped

stone. Blades and flakes occur in low frequencies, with blades representing a slightly higher proportion (7%) than flakes (5%). The core and core fragments came in low quantities, representing 4% of analyzed lithics. In general, the analyzed sample for the MPPNB is large, leading to high counts within lithic categories, some even occur in low proportions.

The analysis of MPPNB cores (figure 3) displayed a variety of core types, in which the percentages of opposed platform cores and the multiple platform cores. Core technological elements include a high percentage of crested blades, suggesting frequent use of naviform cores during the MPPNB, even though this core type was not found in the analyzed contexts for this period. Other technological elements represented in low proportions include platform blades (2%) and rejuvenations (6%).

Retouched blades are the most abundant tools in the MPPNB (36% of tools; figure 4), followed by notches (19%), the retouched flakes (17%) and truncations (15%). Other diagnostic tools present in low portions are borers (2%), burins (4%), scrapers (1%), sickle blades (2%) and denticulates (3%). Some Neolithic researchers consider denticulates, retouched blades and truncations to be different types of sickle blades.

An analysis of truncations, notches and denticulates (figure 5) shows the highest percentages for truncated blades (33%), notched blades (28%) and notched flakes (22%). Truncations and denticulates found at low frequencies are truncated flakes (6%), bitruncated blades (2%), denticulated blades (2%) and denticulated flakes (6%).

II- M/LPPNB Lithic Analysis

Analysis of the lithic technology for the Middle to Late PPNB (figure 6) demonstrated primary use of blade/flake technology, in which blade tools constitute the highest proportion (34%), followed by flakes (18%), flake tools (18%) and blades (17%). Flakes represent 18%, and flake tools represent 18%, while blade tools have the highest portion of all and they represent 34% of the selected lithic sample. The other technological types are represented at low frequencies ranging between 8% and 2%, although their sample sizes are

substantial.

Cores from the M/LPPNB period exhibit a wide range of types, in which opposed platform cores (14%) and multiple platform cores (12%) are the most abundant. Other types of cores present in low proportions include single platform cores, sub-discoidal cores, pyramidal cores, sub-pyramidal cores and cores on flakes. Among core/lithic technology elements core fragments, core tablets, platform blades, crested blades and rejuvenations are found in abundance, indicating substantial lithic manufacturing during the M/LPPNB. In addition, the relatively high frequency of opposed platform cores explains an accompanying high proportion of blade tools.

Among M/LPPNB tools (figure 8), retouched blades are found in the highest proportion (33% of tools), followed by truncations (17%) and notches (14%). Diagnostic tools include a moderate proportion of borers (9%), with other diagnostic tools, such as burins, scrapers, sickle blades and denticulates, ranging from 4% to 2% of the selected tool sample.

Analysis of truncations, notches and denticulates (figure 9) shows that truncated blades (27% of tools) are much more abundant than truncated flakes (10%) in M/LPPNB, with Hagdud truncations present at a low percentage. Notched blades and notched flakes occur in similar proportions (27%), with denticulated flakes (5%) found at higher frequencies than the denticulated blades (2%).

III- LPPNB Lithic Analysis

The analysis of LPPNB lithics shows that this period is dominated by flake/blade technology (figure 10). Blade tools occur most frequently (26%), followed by comparable proportions of large flakes, flake tools and blades (approx. 15% each). Cores and core fragments are at much lower rates (9% and 7%, respectively).

LPPNB cores (figure 11) are dominated by opposed platform cores (32%), while multiple platform cores and core fragments represent 9% of the selected core samples. Single platform cores and cores on flakes represent only 2% of the selected sample. The high frequency of crested blades (36%) reflects the utilization of naviform core technology, and indicates that many of the opposed

platform cores are naviform cores. Opposed platform cores (which usually are used to produce blades) also accord with high proportions of blade tools and crested blades.

Tool type analysis indicates the use of substantial numbers of diverse tools, and correspondingly diverse activities, in LPPNB (figure 12). Notches, the most common tool type, constitute 23% of the selected tool sample. Moderate proportions of retouched tools appeared during this period, including retouched blades (15%) and retouched flakes (18%). Among diagnostic tools borers constitute a considerable portion (10 %) of the tool selected sample, while other diagnostic tools are found at similar or slightly lower frequencies: truncations (10%), denticulates (8%), sickle blades (6%), burins (6%) and scrapers (4%).

Truncations, notches and denticulates appear abundantly in the LPPNB period (figure 13), with notched blades at the highest relative frequency (30%), followed by notched flakes (23%), denticulated flakes (13%) and denticulated blades (10%). Truncations range from truncated blades (13%) to much lower frequencies of truncated flakes, Hagdud truncations and bitruncated blades (3% each). In general, the variety of truncations, notches and denticulates made on blades fits well with the common appearance of blade tools in the lithic technology analysis.

IV- PPNC/Yarmoukian Lithics Analysis

Blade technology dominates the PPNC/Yarmoukian assemblage, representing 31% of the sample analyzed, with flakes constituting a lesser proportion (22%) of the assemblage. Cores contribute the largest amount (32%) of lithic material analyzed, while blade tools, bladelets and core fragments occur in small proportions ranging from 8% to 3% of the selected sample. Cores for blade production include opposed platform cores, multiple platform cores and naviform platform cores. Flakes usually were produced from multiple platform cores and discoidal platform cores.

Cores appear in a variety of forms during the PPNC/Yarmoukian period, including multiple platform cores (31%), opposed platform cores (25%) and discoidal platform cores (13%) Cores on flakes and naviform platform cores occur in low proportions (6% each). PPNC/Yarmoukian lithic tools were recovered only

in small numbers and are excluded from this analysis.

V- Arrowhead Analysis

A sample of 346 arrowheads drawn from both firmly dated and less securely dated loci demonstrates the presence of 11 distinct types of arrowheads at Tell Abu Suwwan (figure 16), in substantial frequencies for four types (Jericho, Byblos, Jericho/Byblos and Amuq points) minor frequencies for the other seven (al-Khiam, Helwan, Mureybetian, Byblos/Amuq, ha-Parsa, Nizzanim and Herzliya points). Typological analysis of these points and its chronological implications may be summarized briefly: 1) The presence of al-Khiam points in the surface collection indicates that Tell Abu Suwwan probably includes a PPNA occupation; 2) Helwan points suggest EPPNB occupation; 3) High frequencies of Jericho points, Jericho/Byblos points, Byblos points accord well with the abundant excavated evidence for a substantial settlement in the MPPNB and LPPNB periods; 4) The high percentage of Amuq points is a strong indication for Yarmoukian occupation at the site; 5) The presence of Ha-Parsa, Nizzanim and Herzliya points also supports the inference of Yarmoukian occupation at Tell Abu Suwwan.

Research on Neolithic stone tool technology often utilizes an arrowhead typology that has been assumed to be chronological (e.g., Gopher 1994). Few studies, however, have tested this notion against the chronological sequence of the Neolithic period. The securely dated contexts from Tell Abu Suwwan provide good examples of a range of Neolithic arrowhead types which are used to assess this supposition. In overview (figure 17), the arrowhead assemblage at Tell Abu Suwwan includes three types in the MPPNB (Jericho, Jericho/Byblos and Byblos points), a slightly different combination of three types in the M/PPNB (Mureybetian [one of Jericho types], Jericho and Byblos), four types in the LPPNB (Mureybetian, Jericho, Byblos and Jericho/Byblos), and only one type (Amuq) in the PPNC/Yarmoukian Periods.

Conclusions

The PPNB chipped stone technology is noteworthy as a blade dominated industry, particularly involving production of sickle blades, borers, knives, scrapers, drills and burins. This analysis of the lithic evidence from Tell Abu Suwwan confirms the emphasis on blade production during the PPNB and PPNC periods. In his summary of the lithic characteristics of the Neolithic Period in the Levant, Simmons (2007) notes the common use of long inversely retouched sickle blades during the MPPNB. The analysis of MPPNB lithic technology at Tell Abu Suwwan indicates high percentages of blade tools. Within this tool type, Abu Suwwan reveals high frequencies of retouched blades, medium percentages of truncations and denticulates, and low frequencies of sickle blades (glossy blades). This result indicates the probable use of retouched blades, truncations and denticulates as sickle blade elements.

Many other Neolithic sites show widespread examples of Naviform and other types of the blade cores (Simmons 2007: 130). Tell Abu Suwwan features a variety of core types, clearly incorporating single platform cores and opposed cores in low to medium relative frequencies. Other core types from the MPPNB include multiple platform cores and ninety degree cores, which could produce both flakes and blades. Although no naviform cores are identified in the analyzed lithics from Abu Suwwan, large numbers of crested blades (one of the naviform reduction stages) strongly implicate the use of naviform cores by its inhabitants.

At other Neolithic sites, sickle blades maintain substantial frequencies through the LPPNB, while among core types opposed platform cores and the informal flake cores become more common and naviform cores decline in number (Simmons 2007: 130). In keeping with these trends, sickle blades are abundant at Tell Abu Suwwan, where they are accompanied by high frequencies of LPPNB opposed cores and crested blades. Although naviform cores were absent from the analyzed samples from Tell Abu Suwwan, crested blades commonly were identified in high percentages. This result indicates that naviform core technology was emphasized during the LPPNB occupation of Tell Abu Suwwan.

The PPNC displayed major regional changes in lithic technology and raw material types, including striking declines in the use of once-dominant naviform

cores and sickle blades (Simmons 2007: 130-133). The most pronounced characteristic of PN (Yarmoukian) lithic assemblages is the preponderance of flake, rather than blade, technology. At this time, there was more emphasis on pyramidal cores and reduction of bipolar cores. However, assemblages from this period include different types of sickle blades including a Yarmoukian diagnostic type with coarse regular denticulation on its cutting edge. Additionally, this period included narrow adzes were transformed later into trapezoidal forms (Banning 1998: 203-208; Simmons 2007: 207-208). The analyses of lithic technology at Tell Abu Suwwan during these periods reinforces this inferred emphasis on flake technology, as reflected by substantial numbers flake cores, as exemplified by multiple platform cores, cores on flakes and discoidal platform cores. Interestingly, crested blades are absent in this time range, although naviform cores are apparent.

Arrowheads, considered one of the most important tools manufactured and used tools during the PPNB and PN periods, often are treated as markers of chronological and geographical distributions (Burian and Friedman 1985; Gopher 1985, 1994). Following Neuville's (1951) distinction of al-Khiam points, Bar-Yosef (1981) interpreted al-Khiam and Helwan points as indicators of the PPNA, and proposed Amuq, Byblos and Jericho points as PPNB markers (Bar-Yosef 1981; Nishiaki 2000:23). In general, the MPPNB period is known for high frequencies of Jericho and Byblos arrowhead types, while the LPPNB tends be dominated by Byblos and Amuq points (Simmons 2007: 132). In contrast, the PPNC displays smaller, lighter points (Kuijt and Goring-Morris 2002: 417-418). Finally, during the Yarmoukian period in the southern Levant, the most common arrowhead types were Ha Parsa, Nazzaniam and Herzliya points. Because of their small size, some researchers suggest that these points were used for hunting birds (Banning 1998: 204).

The typo-chronological analysis of arrowheads from securely dated contexts at Tell Abu Suwwan corroborates the chronological inferences derived from previous studies based on other Neolithic sites in the Levant (e.g. Gopher 1994; Nishiaki 2000). Additionally, the typological analysis indicates there are other Neolithic layers at Tell Abu Suwwan (e.g., PPNA) that will require future investigation. The

results presented here also demonstrate the value of further research on Neolithic arrowheads to refine our chronological inference both at Abu Suwwan and regionally. This type of study promises to illustrate inter-site and intra-site similarities and differences in arrowhead descriptive and metric attributes.

Finally, the typo-chronological analysis used in this study demonstrates that Tell Abu Suwwan's chipped stone chronology matches the lithic technological stages seen at other Neolithic sites, while also revealing differences in some lithic types between Abu Suwwan and other Levantine Neolithic sites. These differences probably relate to the activities preformed at these sites and, hence, their site functions. Further material culture analyses like the study presented here will provide greater understanding of the socio-cultural and socio-economic changes within the Neolithic community at Tell Abu Suwwan and at other contemporary Levantine sites in general and Jordanian sites in particular.

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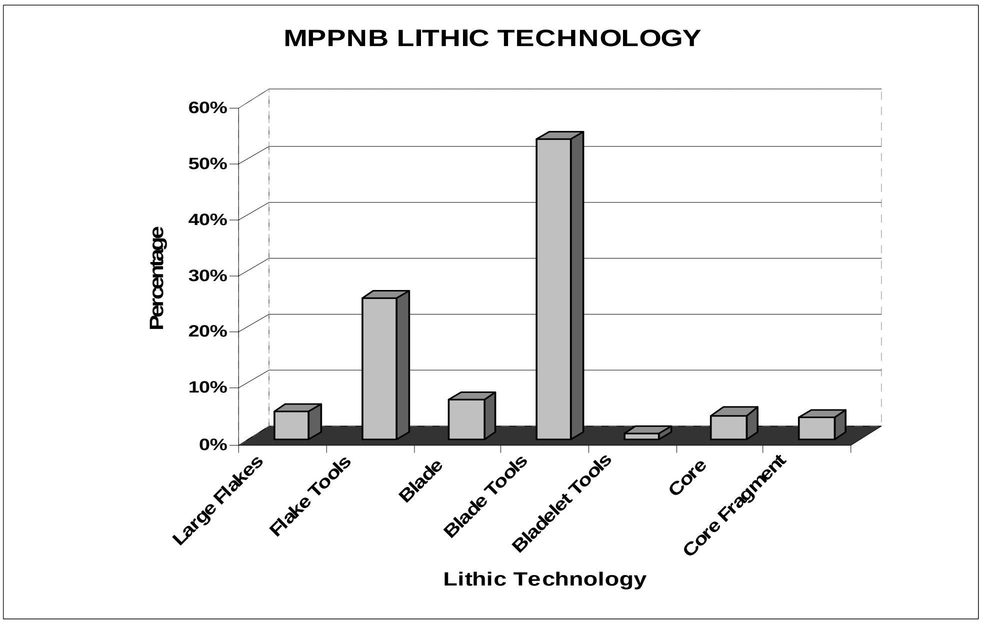


Figure 2: Middle Pre-Pottery Neolithic B Lithic Technology.

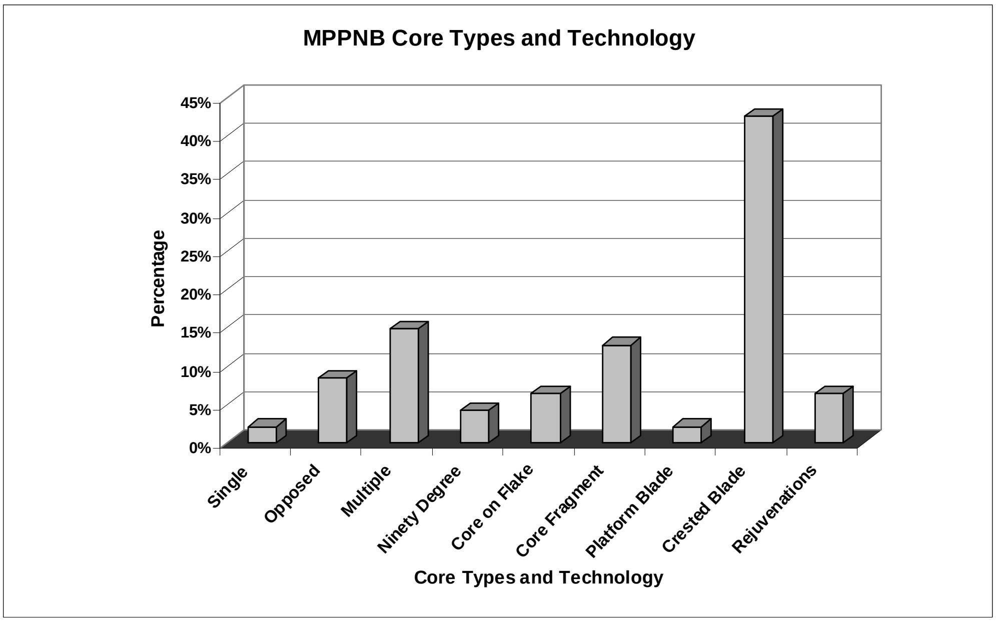


Figure 3: Middle Pre-Pottery Neolithic B Core Types and Technology.

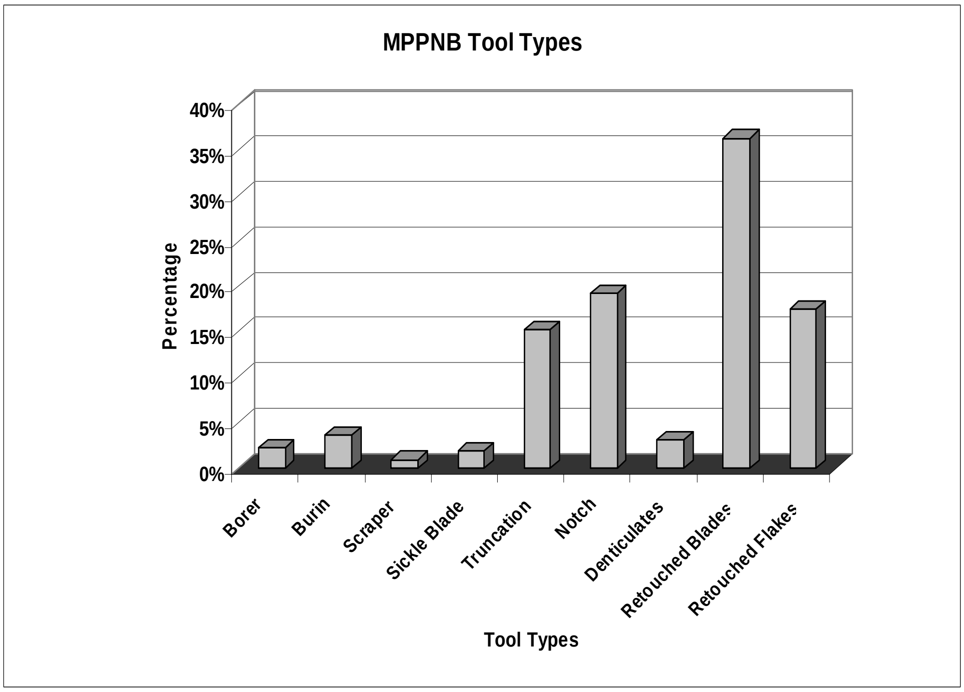


Figure 4: Middle Pre-Pottery Neolithic B Tool Types.

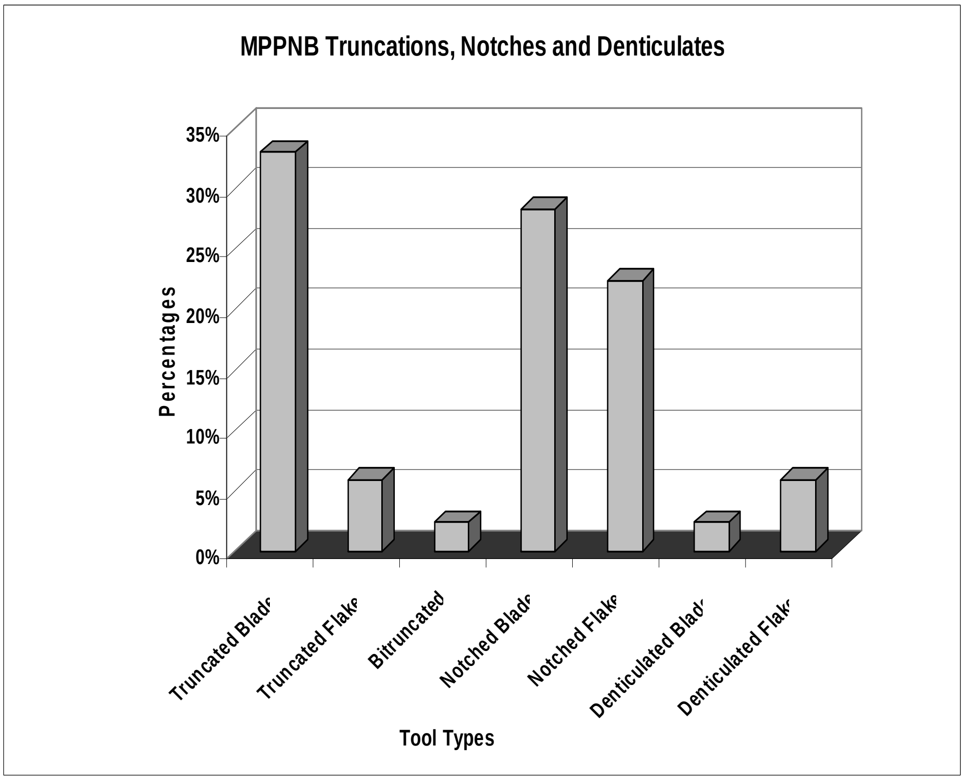


Figure 5: Middle Pre-Pottery Neolithic B Truncations, Notches and Denticulates.

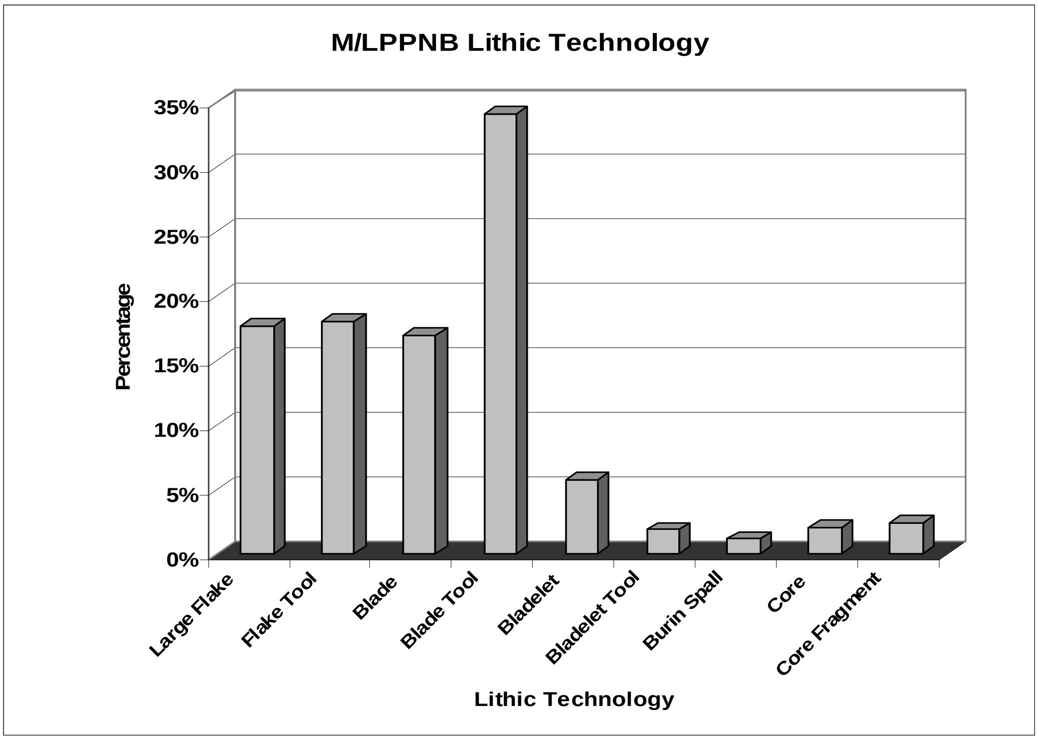


Figure 6: Middle/Late Pre-Pottery Neolithic B Lithic Technology.

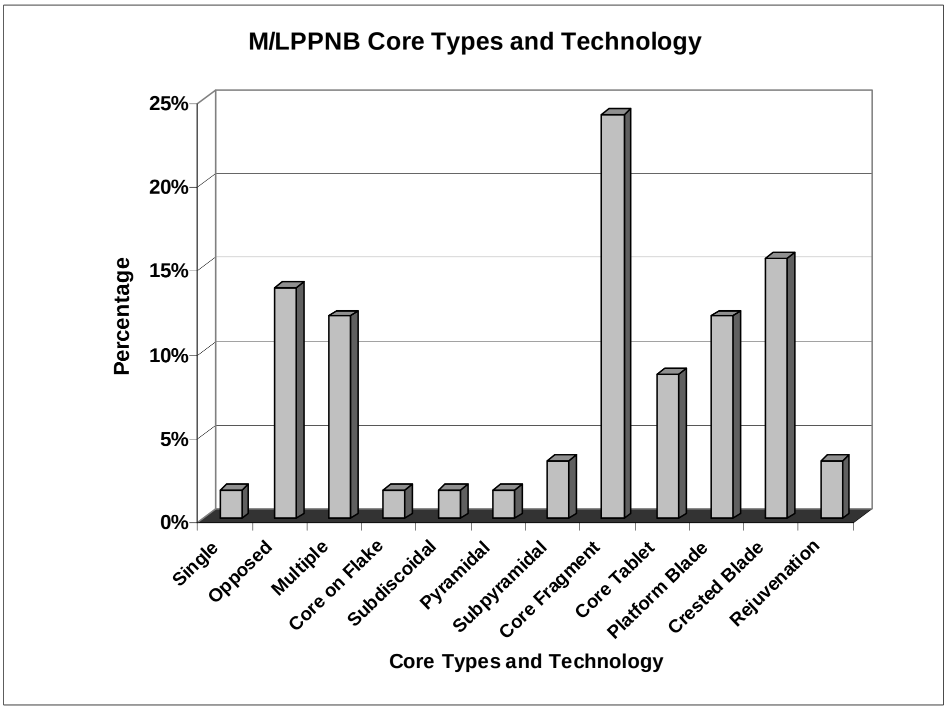


Figure 7: Middle/Late Pre-Pottery Neolithic B Core Types and Technology.

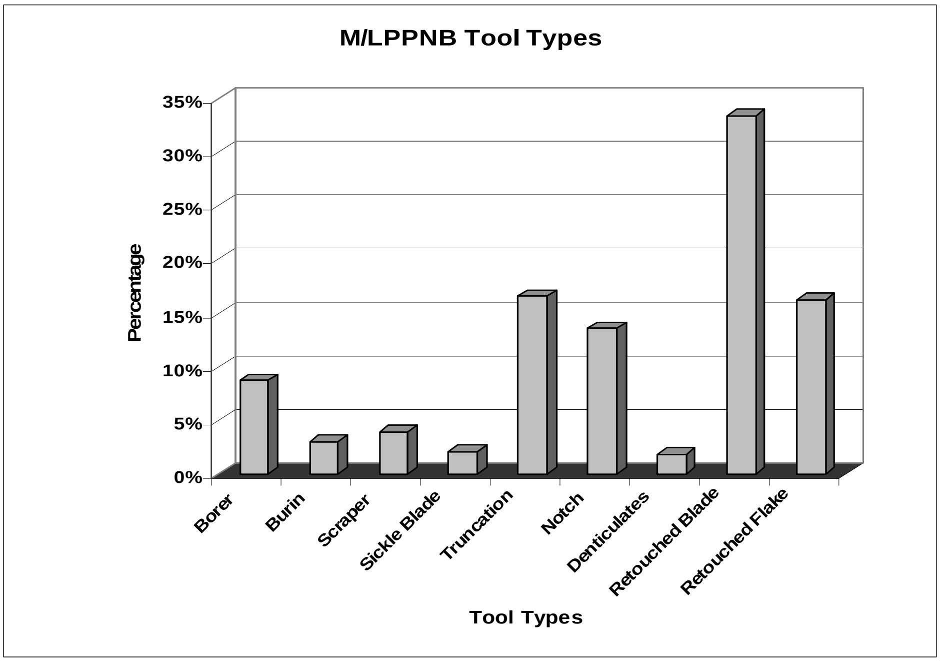


Figure 8: Middle/Late Pre-Pottery Neolithic B Tool Types.

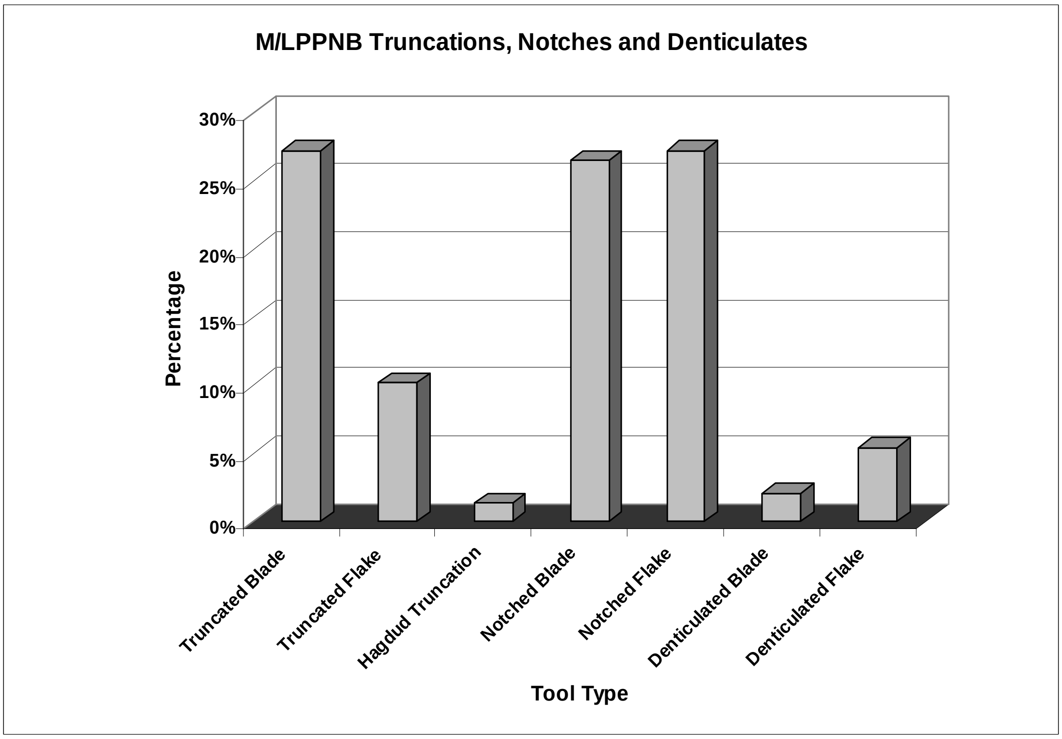


Figure 9: Middle/Late Pre-Pottery Neolithic B Truncations, Notches, and Denticulates.

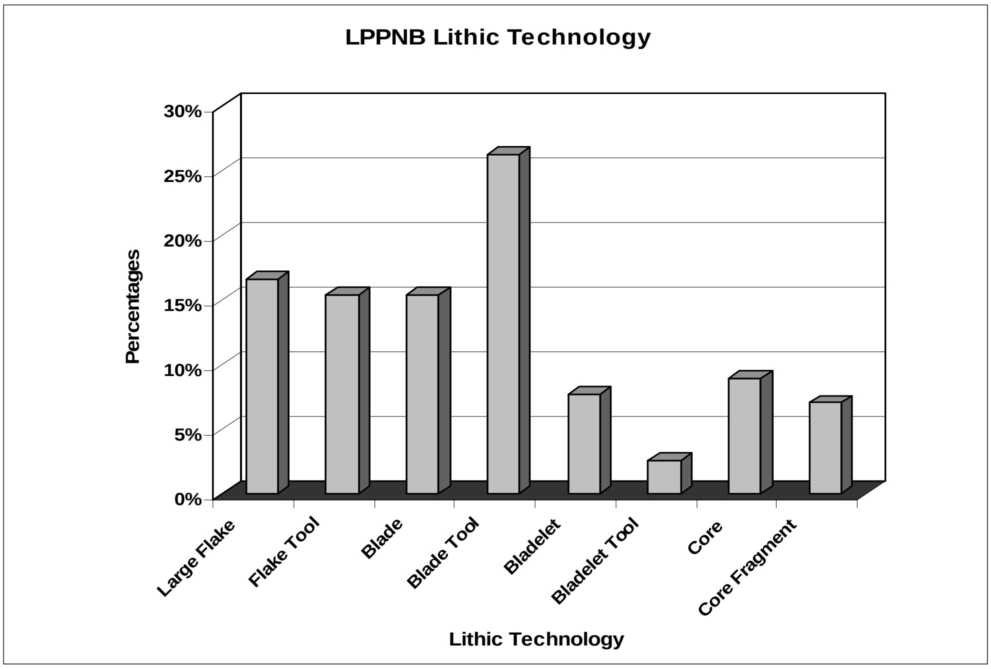


Figure 10: Late Pre-Pottery Neolithic B Lithic Technology.

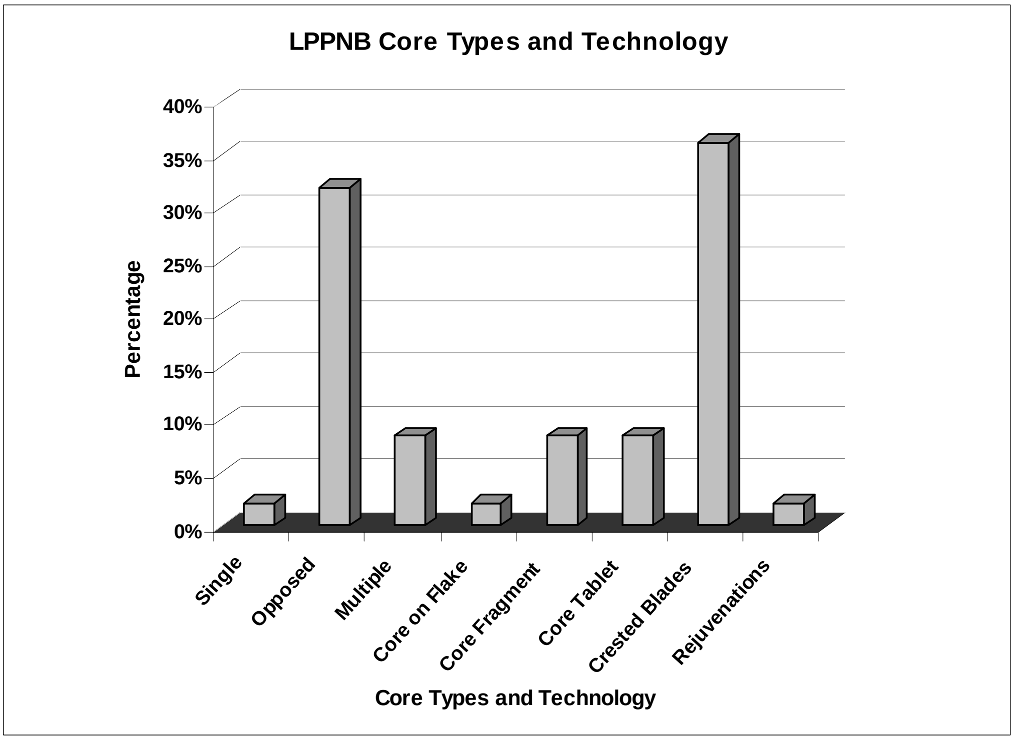


Figure 11: Late Pre-Pottery Neolithic B Core Types and Technology.

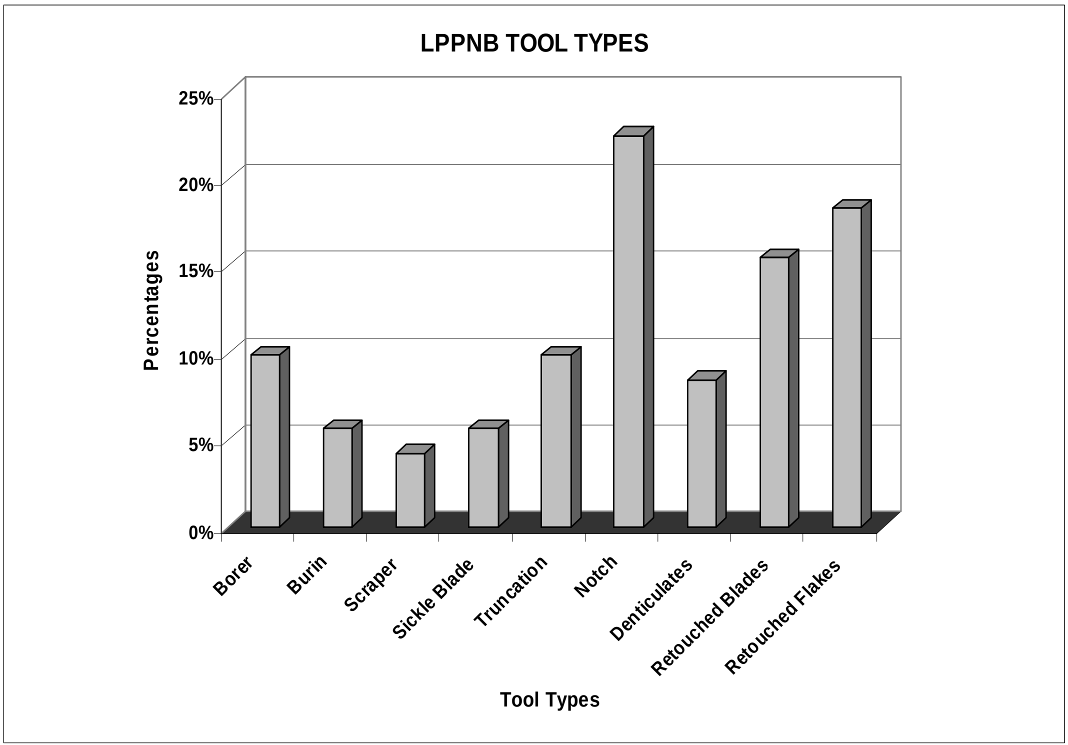


Figure 12: Late Pre-Pottery Neolithic B Tool Types.

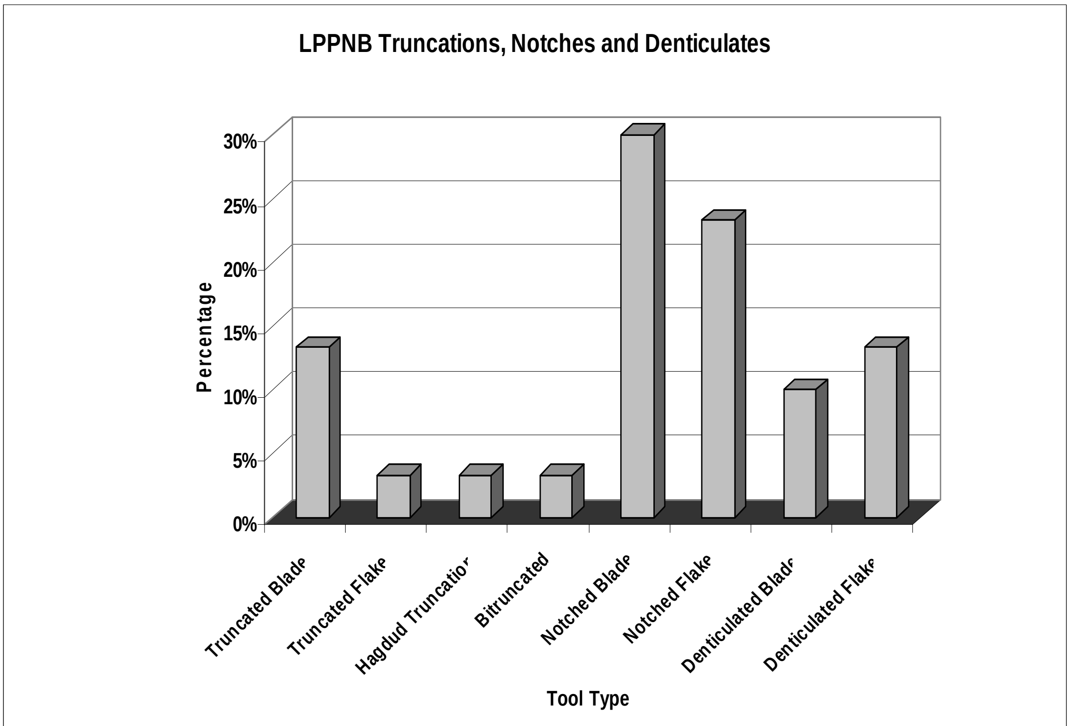


Figure 13: Late Pre-Pottery Neolithic B Truncations, Notches and Denticulates.

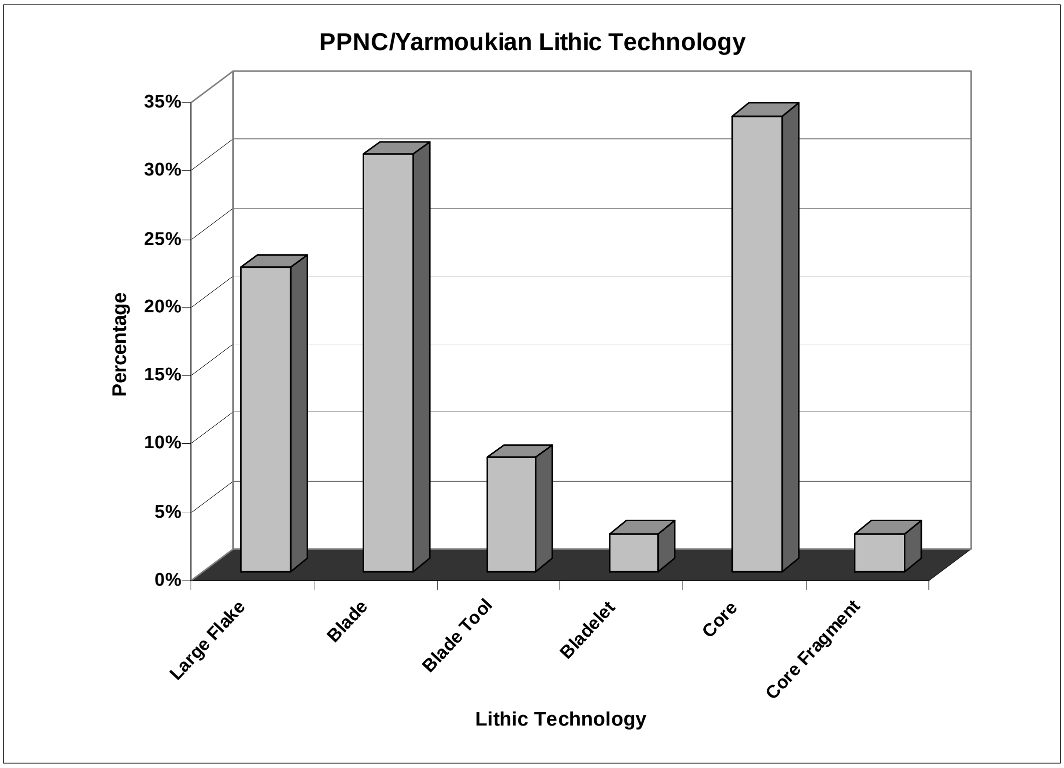


Figure 14: Pre-Pottery Neolithic C and Yarmoukian Lithic Technology.

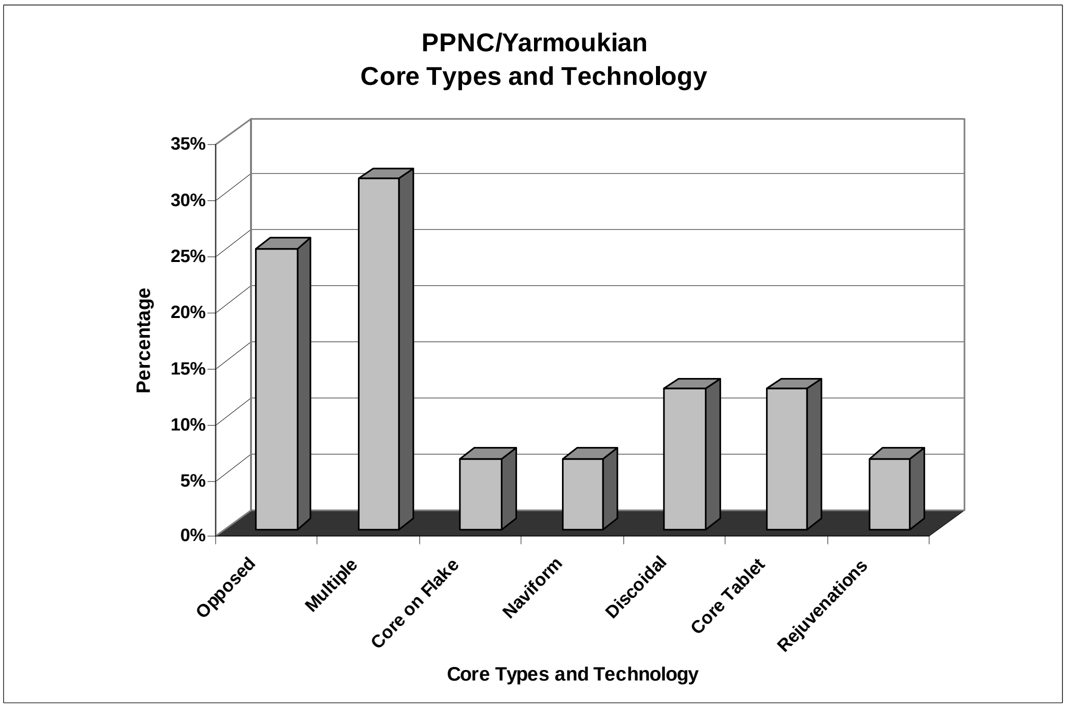


Figure 15: Pre-Pottery Neolithic C and Yarmoukian Core Types and Technology.

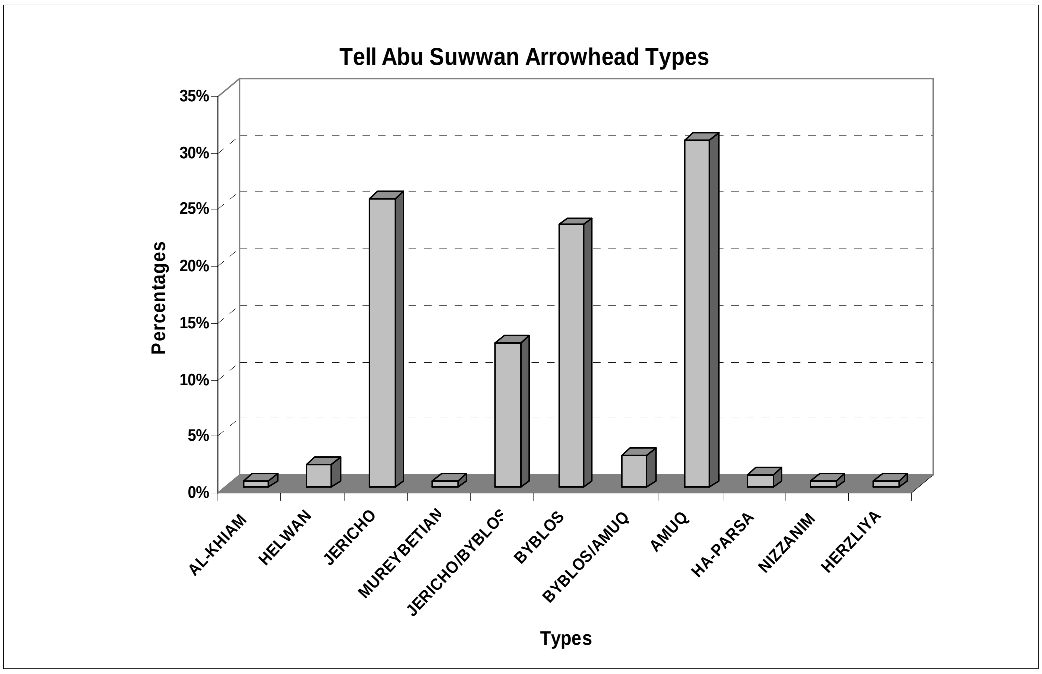


Figure 16: Arrowhead Types at Tell Abu Suwwan.

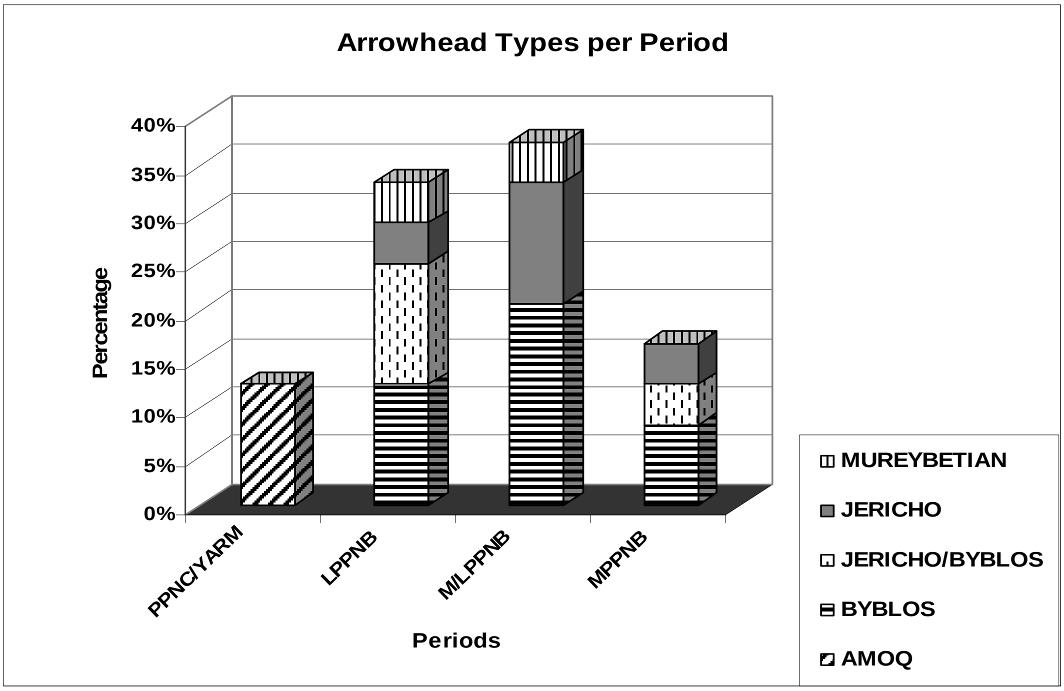


Figure 17: Pre-Pottery Neolithic and Yarmoukian Arrowhead Types per Period.

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دراسة الأدوات الصوانيه تصنيفياً وزمنياً و تحليلياً من فترة العصر الحجري الحديث في الأردن، حالة دراسية: موقع تل أبو صوان

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ملخـص

يعتبر موقع تل ابو الصوان والذي يعود لفترة العصر الحجري الحديث أحد القرى الزراعية الكبيرة في الاردن، و هو يقع الى الشمال من مدينة عمان الحالية وشرق المدينة الرومانية الأثرية في جرش. تم اجراء اربعة مواسم للحفريات الأثريه في الموقع تبين من خلالها ان الموقع قد تم استيطانه في فترات العصر الحجري الحديث ما قبل الفخاري بمراحله الثلاثة (أ و ب وجـ) وفي فترة العصر الحجري الحديث الفخاري (المرحلة اليرموكية). عثر أثناء التنقيبات على عدد هائل من الادوات الصوانية أتت من ٤٥ مربعا (مساحة المربع الواحد ٥ *٥ م). هذا البحث يقدم نتائج التحليل و الدراسه لـ ـ (١٥٠٠) قطعة صوانية مشُكّله اضافة الى (٣٠٠) رأس سهم تم استخراجها من الطبقات التي تم تأريخها تأريخاً مطلقاً في الموقع، و قد أثبتت الدراسة أن الادوات الصوانية التي تواجدت في تل أبو الصوان تتوافق مع الادوات التي تواجدت في المواقع الاخرى في منطقة جنوب شرق المتوسط والتي تعود لنفس الفترات الزمنية، ذلك بالإضافة الى ظهور أدوات جديدة ونادرة في الموقع تعود لنفس الفترات الزمنية.

الكلمات الدالة: تل ابو الصوان، العصر الحجري الحديث، الدراسة التحليلية للأدوات الصوانية، الاردن.

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